

ENTOMOLOGY.—*New American Tingitidae (Hemiptera)*.¹ CARL J. DRAKE, Iowa State College, Ames, Iowa.

This paper contains the descriptions of seven new American lace bugs, including one from Guam Island. Two of the species were intercepted at ports of entry into the United States by Federal quarantine officials; *Phatnoma ecuadoris* at New York City and *P. barberi* at San Francisco from Ecuador. The types of all the new species are in the U. S. National Museum.

Phatnoma ecuadoris, sp. nov.

Allied to *P. varians* Drake, but readily distinguishable by its wider paranota, more elevated carinae, and slenderer form. Head with seven spines, the middle pair stouter at the base than in *varians*. Antennae rather long, slender, segment III about three and one-half times as long as IV, the latter mostly black. Bucculae longer, more widely reticulated, less excavated on each side before apex and not so strongly produced downward at apex as in *varians*. Rostrum long, testaceous.

Pronotum moderately convex, coarsely pitted, tricarinate; lateral carinae more elevated, the areolae a little larger; paranota wider and more sharply angulate at the sides than in *varians*, biseriate behind, triseriate in front and quadriseriate at lateral angle; collar raised, composed of three rows of areolae. Elytra grayish brown, the enlarged, transverse nervures and some of the nervelets dark fuscous; costal area moderately broad, quadriseriate in basal fourth, thence to apex largely triseriate; subcostal are a broader, largely five areolae deep; discoidal area long, about three-fourths the length of the elytra, five areolae deep in central portion, the outer boundary raised and its nervure for about three-fourths of its length foliaceous and composed of one row of low, rectangular areolae, the inner boundary also raised, foliaceous and uniseriate for almost its entire length; sutural area brownish, without markings.

Length, 2.90 mm; width, 1.30 mm.

Holotype, male, Ecuador, collected in bananas at port of entry, New York City.

Phatnoma barberi, sp. nov.

Head black, with seven long, slender, pale-tipped spines, the front pair and median a little longer than the middle pair, the hind pair much longer, slenderer, and strongly curved forward. Bucculae long, dark brown, contiguous in front. Rostral laminae pale testaceous, subparallel; rostrum testaceous, very long, extending on venter. Legs moderately long, dark-fuscous, the tibiae and tarsi largely brown. Eyes black. Antennae dark fuscous, moderately long; segment I much stouter and twice as long as II; III long, a little more than twice as long as IV, becoming darker apically; IV darker, rather long, moderately swollen on the distal half.

Pronotum very coarsely pitted, moderately convex, dark ferruginous, shiny, tricarinate; median carina uniseriate, the areolae rather small; lateral carinae parallel, not quite extending to calli, each uniseriate, but not quite so high as median; collar distinctly raised, areolate; paranota similar in form to *P. marmorata* Champ., but not quite so wide, mostly three to four areolae

¹ Received February 5, 1941.

deep, the areolae hyaline, the hind margin pale. Scutellum exposed, small. Elytra strongly overlapping and rounded posteriorly, brown, with whitish testaceous markings and some of the transverse nervures of costal area dark fuscous; costal area broad, four areolae deep on basal and apical portions, three deep in middle, the areolae hyaline; subcostal area broad, finely reticulated, largely five areolae deep, with four, enlarged, whitish, transverse nervures; discoidal area broad, long, extending to the apical fourth of elytra, with three enlarged, whitish, transverse nervures, the nervure separating it from subcostal area raised, foliaceous, with one row of moderately large areolae, the apical margin not raised or reticulate, the inner boundary raised, uniseriate, not quite so high as outer nervure and extending posteriorly between subcostal and discoidal area. Wings slightly longer than abdomen.

Length, 2.95 mm; width, 1.25 mm.

Holotype, female, Colombia, South America, intercepted by Federal inspectors at Port of Entry, San Francisco, Calif.

This species is very distinct and not easily confused with any other member of the genus. It is about the size of *P. varians* Drake from French Guiana, but readily separated from it by the foliaceous carinae and foliaceous nervures bounding discoidal area. *P. marmorata* Champ. has a much broader costal area and is differently colored.

Tingis guamensis, sp. nov.

Moderately large, without hairs, testaceous, with inconspicuous brown markings. Head flat above, testaceous, without spines. Eyes very large, dark reddish brown. Rostrum extending almost to end of sulcus, brownish, black at apex; laminae foliaceous, pale, testaceous, becoming more widely separated posteriorly, concave within on each side on both mesosternum and prosternum, connected at apex by a low narrow ridge. Bucculae broad, testaceous, areolate, closed in front. Antennae moderately long, slender, testaceous, the apical segment brownish; segment I short, stouter and a little longer than II; III a little more than two and a half times as long as IV.

Pronotum very coarsely pitted, convex above, subtruncate, tricarinate; lateral carinae indistinct on disk, obsolete in front, fairly distinct on triangular process; median carina sharply developed and indistinctly areolate; paracosta very narrow, linear, slightly broader opposite humeri, there with distinct areolae. Elytra with outer margin rounded and narrowed posteriorly, strongly overlapping and jointly rounded behind; costal area rather broad, with a transverse, fuscous band (veinlets of 6-8 areolae) near middle, mostly biseriate, triseriate in widest part, the areolae rather small; subcostal area broader, six areolae deep in widest part, the areolae small; discoidal area large, reaching a little beyond middle of elytra, eight areolae deep at widest part near middle, narrow at base and apex, the boundary nervures distinct but not prominent, nearly triangular in outline; sutural area more widely areolate posteriorly. Some veinlets of subcostal, discoidal, and sutural areas brownish to dark fuscous.

Length 3.30 mm; width, 1.50 mm.

Holotype, female, Island Guam, D. T. Fulloway.

This species belongs to the subgenus *Tingis* Fabr. and is not easily confused with its congeners.

Acalypta mera, sp. nov.

Small, elongate-ovate, grayish brown. Head black, with two short, blunt,

porrect, frontal spines. Bucculae open in front. Rostral laminae subparallel, testaceous, not meeting behind; rostrum brownish, black at apex, extending almost to hind margin of first venter. Legs dark brown, the tibiae testaceous, the tips of tarsi black. Antennae moderately long, indistinctly pilose; segment I dark brown, much stouter and nearly twice as long as II, the latter dark brown; III testaceous two and one-half times as long as IV; IV almost entirely black, shiny, fusiform.

Pronotum almost flat, very coarsely pitted, almost reticulate in appearance, distinctly areolate behind; carinae foliaceous, each uniseriate, the median slightly more elevated, the lateral carinae strongly divaricating posteriorly, extending from base of hood to hind margin of triangular process. Paranota moderately broad, with moderately large areolae, biseriate in front, uniseriate behind, the outer margins slightly rounded. Elytra with costal area uniseriate, the areolae rather large; subcostal area much wider, with four rows of confused areolae; discoidal area large, broad, about three-fourths of the length of the elytra, bounded by a costate nervure, widest for some distance at the middle, there five areolae deep, the outer margin distinctly raised and sinuate.

Length, 1.80 mm; width, 0.50 mm.

Holotype, brachypterous male, British Columbia, Canada, September 10, 1928.

Of the western species, *A. mera* is probably most closely related to *A. vandykei* Drake but is slenderer and has strongly divaricating lateral carinae. It may be also separated from *A. barberi* Drake of New York by its much smaller size, longer rostrum and paranota. In the writer's collection, a long-winged specimen of *Acalypta* from Oregon seems to be *A. mera*.

Leptopharsa papella, sp. nov.

Moderately long, broad, testaceous, with brown to dark fuscous markings. Head black, convex above, with five, moderately long, testaceous spines, the median stouter and porrect. Rostrum brownish, dark at apex, extending to middle of mesosternum; rostral channel with sides parallel on mesosternum, broader and cordate on metasternum, open behind. Body beneath brownish black. Legs slender, testaceous, the tarsi dark. Antennae slender, moderately long; segments I and II brown, the former very much stouter and a little more than three times as long; III very slender, testaceous, nearly four times as long as IV, the latter slightly enlarged and brownish black.

Pronotum convex, coarsely pitted, tricarinate, the triangular projection testaceous and reticulate; carinae foliaceous, testaceous, each uniseriate; lateral carinae strongly constricted near the middle, terminating anteriorly a little distance behind the hood; hood moderately large, inflated, slightly produced forward in front, extending backward on pronotum, the crest narrow and part of hind portion; paranota testaceous, moderately large, widest opposite humeri, there broadly angulate and three areolae deep. Elytra broad, strongly overlapping, testaceous; four or five transverse nervures of costal, two small spots in discoidal and apical veinlets of sutural areas embrowned; costal area broad, mostly biseriate, triseriate in widest part; subcostal area broader, mostly triseriate; discoidal area large, extending slightly beyond middle of elytra, there five areolae deep, rounded at apex; sutural area closely reticulated at base, more widely reticulated apically, some of the veinlets along the inner margin and in apical fourth infusate. Areolae hyaline, iridescent.

Length, 3.30 mm; width, 1.60 mm.

Holotype, female, Ashton, Md., August 27, 1938. P. W. Oman.

This species resembles certain members of the genus *Gargaphia* Stal, in general appearance, but does not have an interrupted rostral channel. It differs from *L. velifer* (McAtee) in having a narrower paranota and costal area, smaller hood; the median carina is much less foliaceous and its dorsal margin not so sinuate.

***Gargaphia valerioi*, sp. nov.**

Large, whitish testaceous, the pronotum black, the oblique, costate nervures of costal area black-fuscous, the margins of paranota clothed with long pale hair. Head brown, with five slender spines, the median much longer and porrect. Antennae long, beset with long, pale, bristly hairs, brown, the apical segment black; segments I and II dark brown, the former larger and two and one-half times as long as the latter: III about three and three-fourths times the length of IV, the latter long and slightly enlarged. Rostrum extending to transverse suture.

Pronotum black, convex, covered with whitish exudation, the triangular portion reticulate, whitish testaceous, tricarinate; carinae foliaceous, each uniseriate, the areolae large, the lateral carinae on disk faintly convex within, the median distinctly arched on disk of pronotum; hood rather small, narrow to crest, almost conical in form, slightly produced forward at base; paranota broad, strongly reflexed, obtusely produced, widest opposite humeri, there four areolae deep. Elytra broad, widening posteriorly, their tips separated when at rest; costal area very broad, the outer margin broadly rounded and beset with very fine, moderately long spines; subcostal area narrow, biseriate, discoidal area not reaching middle of elytra, broadest beyond middle, there six areolae deep, some of the apical nervelets embrowned; sutural area finely reticulated at base, becoming widely reticulated distally.

Length 4.65 mm; width, 1.45 mm.

Holotype (male), allotype (female), and paratype (female, broken), La Gloria, Costa Rica, altitude 900 feet, July 1931, M. Valerio. Named in honor of the collector.

This species is not easily confused with other North American members of the genus. The long hairs, shape of paranota and elytra are distinguishing characters. The lateral margins of elytra are beset with rather stiff bristly hairs, which are much shorter than the hairs on pronotum and carinae.

***Corythucha omani*, sp. nov.**

Similar to *C. unifasciata* Champ. but distinctly smaller and with the hood not so sharply constricted and the tumid elevations of elytra more roundly inflated. Testaceous, a transverse band near base and some of the veinlets of hood, paranota, tumid elevation and sutural area and a few transverse nervures near apex of elytra infusate. Antennae moderately long, testaceous, beset with long bristly hairs; segment I about three times as long as II; III nearly two and one-half times as long as IV; the latter swollen toward the apex and mostly dark brown. Legs brownish, the tibiae and tarsi testaceous; rostrum extending to the metasternum.

Pronotum brown, finely pitted, moderately convex, tricarinate; lateral carinae rather short, raised anteriorly, not extending forward beyond base of triangular process; median carina foliaceous, mostly uniseriate, about one-half as high as the hood, the upper margin sinuate. Hood moderately large, strongly inflated, constricted a little in front of middle, the hind portion

subglobose. Paranota large, four areolae deep, the outer margin beset with spines. Elytra distinctly narrowed posteriorly, beset with spines along the outer margins from the base to apical fourth; costal area triseriate, the areolae large and hyaline; tumid elevation plump, moderately large, dark. Wing a little longer than abdomen, whitish.

Length, 3.10 mm; width, 1.10 mm.

Holotype (male) and two male paratypes, Nogales, Ariz., October 23, 1937, P. W. Oman; allotype (female) and paratypes (male and female) Tucson, Ariz., August 1934, C. J. Drake. Named in honor of P. W. Oman, who is taking a very active interest in collecting and studying hemipterous insects.

ANTHROPOLOGY.—Relationships of an early Indian cranial series from Louisiana.¹ HENRY B. COLLINS, JR., Bureau of American Ethnology.

One of the most significant recent developments in Southeastern archeology has been the discovery in Kentucky, northern Alabama, and Tennessee of a nonagricultural, nonceramic, shell mound culture, the earliest thus far known in the area (Webb, 1939; Webb and Haag, 1939, 1940). The Kentucky sites that have been described are Indian Knoll and Chiggerville (Moore, 1916; Webb and Haag, 1939) on the Green River in Ohio County, and the Ward and Kirkland sites on Cypress Creek, a Green River tributary (Webb and Haag, 1940). The Alabama-Tennessee sites are situated on the Tennessee River; Lu° 86 and Ct° 17, in the Wheeler Basin, have already been described (Webb, 1939), and reports on the Pickwick and Gunterville sites are in press or in preparation.

In Louisiana, Ford and Willey (1940) have recognized a similar early culture complex, the Tchefuncte, which preceded the Marksville (Hopewellian) stage. Some of the Tchefuncte sites are coastal shell middens, others are earth mounds in the interior; unlike the Kentucky sites, they all yield pottery.

The skeletal remains from these rather widely separated sites are of particular interest. Though by no means identical, the crania from Kentucky, Alabama, and Louisiana belong to the same general type, a type that differs in certain important respects from that of later inhabitants of the same areas. Measurements on Moore's Indian Knoll crania have been published by Hrdlička (1927), and the skeletal material from Chiggerville has been described by Skarland (1939). Newman and Snow are describing the skeletal remains from the Pickwick and Gunterville Basins and Snow those from the Louisiana shell middens. What I wish to do here is call attention to certain skulls

¹ Published by permission of the Secretary of the Smithsonian Institution. Received February 17, 1941.